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10/673,368

09/30/2003

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EXAMINER

PICH, PONNOREAY

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/673,368

Applicant(s)

CHUNG, HYUN-KWON

Examiner

Ponnoreay Pich

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 15-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This application contains claims 1-2 and 15-48, which are drawn to an invention nonelected with traverse in the reply filed on 3/22/07. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claims 3-14 were examined.

Information Disclosure Statement

Documents listed in the IDS submitted on 9/18/07 were considered.

Response to Amendment and Arguments

Applicant's amendments were noted. Applicant's arguments were also fully noted, but were not persuasive.

On page 10 of the remarks submitted, applicant states that Copeland's flows which the examiner construes as contexts are not generated based on content, but rather represent a series of packets corresponding to the network traffic between a host and a server. As such, applicant states that flows are request for content and are not generated based on the content. The examiner respectfully disagrees. In the broadest sense of the term as used in the claim, "content" is a thing. Applicant recognizes on page 10 of the remarks submitted that a network "flow" is the corresponding packets transmitted between the host and server. Packets are contents which are transmitted and received between the host and server. Because the network flows are comprised of or made from network packets, these flows are generated based on content, i.e. packets, received by the network accessible apparatus, i.e. the host and/or server. As

such, the limitation of generating a context based on content received by the network accessible apparatus is met by Copeland, contrary to applicant's argument.

On page 11 of the remarks submitted, applicant argues that Copeland fails to disclose wherein the context issues a command to perform a specific operation. Applicant states that the network flows disclosed by Copeland already includes a command, which was issued by the host, thus the flow/context disclosed by Copeland does not issue a command to perform a specific operation. The examiner notes that the word "issue" can mean to send out, put forth, or deliver. In other words, the limitation under contention could be interpreted to mean that the context sends out, puts forth, or delivers a command to perform a specific operation. As admitted by applicant on page 10 of the remarks submitted, the network flows disclosed by Copeland are comprised of packets, i.e. packets which carries the command generated by the host. Since it is the network flow which causes the packets containing the commands generated by the host to be delivered to the server, one can interpret that the flow issues/delivers a command to perform a specific operation.

Applicant states that the arguments for claim 12 are similar to those for claim 3. As such, the arguments for claim 12 are traversed using the same reasoning as what was presented above for claim 3. The arguments to the dependent claims were that they should be allowed due to dependency on independent claims 3 and 12. However, because the arguments for claims 3 and 12 were traversed, the dependent claims are also not allowable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Note that with respect to the current application, it is determined that one of ordinary skill in the art at the time applicant's invention was made is someone having at least a BS in Computer Science or Engineering and having experience with network security (or someone with equivalent industry experience).

Claims 3-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland III (US 2002/0144156) in view of Hasuo et al (US 5,367,704).

Claim 3:

Copeland discloses:

1. Generating a context, i.e. flow, based on content, i.e. packets, received by the network accessible apparatus (paragraphs 47 and 53). *A flow is communication in which data is sent and acknowledged, i.e. received by a network accessible apparatus. One skilled in the art of should appreciate that communication between two network devices requires that packets be sent, thus because communication flow is generated based on packets, the limitation is met.*

2. Identifying whether the context, i.e. flow, is a reliable context or an unreliable context, wherein the context issues a command to perform a specific operation (paragraphs 20, 82, and 85). *The cited sections disclose program flows being analyzed to identify whether or not they are authorized. Note that the program flows issues/delivers various command, such as view email stored in an email server as discussed in paragraph 82.*
3. Determining that the specific operation is not permitted when the context is an unreliable context (paragraphs 85-86). *The cited paragraph determined that chat and viewing webpage is not permitted because the flows are of types not allowed, i.e. they are unreliable.*
4. Outputting an error message, i.e. alarm, when the specific operation is not permitted (paragraphs 85-86).

Copeland does not explicitly disclose not performing the specific operation when the specific operation is not permitted. However, the limitation is disclosed by Hasuo (col 3, lines 12-48). At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to modify Copeland's invention such that if a specific operation is not permitted, not performing the specific operation. One skilled would have been motivated to do so because it is standard practice in the art to prevent unauthorized execution of operations that has been banned or not allowed in a computer or network.

Claim 4:

Hasuo further discloses wherein the issuing of the command comprises identifying a reliability of the context based on a flag of a memory into which the context that issues the command is loaded (col 3, lines 12-48). *Note that Hasuo actually uses two flags. One is the name of the program in an allowed program list and the other is a limit value which indicates when a program and its corresponding commands are allowed execution.*

Claim 5:

Hasuo discloses not performing an unauthorized operation (col 3, lines 12-48) and Copeland discloses outputting the error message (paragraphs 85-86). However, neither reference explicitly discloses not performing a preload when the context commands to preload a markup document to secure seamless reproduction of AV data. However, the examiner take official notice that performing a preload when the context commands to preload a markup document to secure seamless reproduction of AV data was well known in the art at the time applicant's invention was made. The limitation reads on buffering AV data that is played in a browser. In light of Hasuo's teachings of not performing an unauthorized operation, it would have been obvious to one skilled in the art to also not perform the operation of preloading a markup document if the context is not authorized. One skilled would have been motivated to do so because not preloading when the context is not authorized would prevent valuable bandwidth from being wasted. Note Copeland recognized wasting of bandwidth as a concern (paragraph 86). Also, as per Hasuo's teachings, all unauthorized program execution and commands are to be prohibited.

Claim 6:

Hasuo discloses not performing an unauthorized operation (col 3, lines 12-48) and Copeland discloses outputting the error message (paragraphs 85-86). However, neither reference explicitly discloses not performing a deletion when the context commands to delete data that is preloaded in a memory of the network accessible apparatus. However, official notice is taken that context commands to delete data that is preloaded in memory of a network accessible apparatus was well known in the art at the time applicant's invention was made, i.e. deleting data from network storage. In light of Hasuo's teachings of not performing an unauthorized operation, it would have been obvious to one skilled in the art to also not perform the operation of deleting data that is preloaded in a memory of the network accessible apparatus when the context is unauthorized. One skilled would have been motivated to do so because it would prevent a hacker from deleting information from a server that they are not authorized to access. Also, as per Hasuo's teachings, all unauthorized program execution and commands are to be prohibited.

Claim 7:

Hasuo discloses not performing an unauthorized operation (col 3, lines 12-48) and Copeland discloses outputting the error message (paragraphs 85-86). Copeland also discloses trying to prevent unauthorized accessing of a web page (paragraph 86), thus together, Copeland and Hasuo renders obvious the limitation of not performing access when the context commands to access data that is recorded on a disk mounted in the network accessible apparatus and outputting the error message. Note that a

Art Unit: 2135

web page is recorded on a web server and viewing the web page means accessing it.

As per Hasuo's teachings, all unauthorized program execution and commands are to be prohibited.

Claim 9:

Hasuo discloses not performing an unauthorized operation (col 3, lines 12-48) and Copeland discloses outputting the error message (paragraphs 85-86). However, neither reference explicitly discloses not performing access when the context commands to access cookies that are stored in the network accessible apparatus by another context. However, official notice is taken that cookies stored on web servers were well known in the art at the time applicant's invention was made as well as commands to access the cookies stored on the web servers. At the time applicant's invention was made, it would have been obvious to not perform cookie access when a cookie access command was issued by an unauthorized context/application. One skilled would have been motivated to do so because as per Hasuo's teachings, all unauthorized program execution and commands are to be prohibited.

Claim 10:

Hasuo discloses not performing an unauthorized operation (col 3, lines 12-48) and Copeland discloses outputting the error message (paragraphs 85-86). Copeland also discloses attempting to perform access when the context commands to access another context that is operated in the network accessible apparatus (paragraphs 82 and 86). Together, the teachings of Copeland and Hasuo render obvious the limitation

Art Unit: 2135

of not performing access when the context commands to access another context that is operated in the network accessible apparatus and outputting the error message.

Claim 11:

Hasuo discloses not performing an unauthorized operation (col 3, lines 12-48) and Copeland discloses outputting the error message (paragraphs 85-86). However, neither reference explicitly discloses not performing control when the context commands to control a reproducing engine, which reproduces AV data recorded on a disk mounted in the network accessible apparatus. However, official notice is taken that performing control when context commands to control a reproducing engine, which reproduces AV data recorded on a disk mounted in the network accessible apparatus, i.e. replicating AV data to an optical drive, was well known in the art at the time applicant's invention was made. It would have been obvious to one of ordinary skill in the art to further modify Copeland's invention according to the limitations recited in claim 11 because as per Hasuo's teachings, all unauthorized program execution and commands are to be prohibited.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland III (US 2002/0144156) in view of Hasuo et al (US 5,367,704) in further view of Goodwin, III et al (US 2002/006591).

Claim 8:

Art Unit: 2135

Hasuo discloses not performing an unauthorized operation (col 3, lines 12-48) and Copeland discloses outputting the error message (paragraphs 85-86). Neither reference explicitly discloses not performing access with the context to access another frame through a frame. However, accessing a frame through another frame, i.e. accessing a webpage from another webpage, was well known in the art at the time applicant's invention was made as disclosed by Goodwin (paragraph 37).

At the time applicant's invention was made, it would have been obvious to one skilled in the art to further modify Copeland's invention according to the limitations recited in claim 8. One skilled would have been motivated to do so because as per Hasuo's teachings, all unauthorized program execution and commands are to be prohibited.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland III (US 2002/0144156) in view of Humes (US 5,996,011).

Claim 12:

Copeland discloses:

1. Issuing a command by a reliable context to read a content (paragraph 82). *Note that a command is issued by an authorized flow to read email stored in a server.*
2. Identifying whether the command is a reliable request or an unreliable request based on syntax of the command (paragraphs 116 and 118). *The packet header*

of the flow is analyzed to identify if the packet carries a reliable or unreliable request. A reliable request would have proper header syntax.

3. Generating a reliable context corresponding to the content when the command is a reliable request (paragraph 82). *Since the computer is authorized to utilized SMTP to access email, no alarm is generated. One can reasonably assume then that access to the email is allowed and a reliable context is generated which allows the user to view the email.*

Copeland does not explicitly disclose generating an unreliable context when the command is the unreliable request. However, the limitation is disclosed by Humes (col 3, lines 14-22). The cited portion of Humes discloses a "forbidden" page being sent to the user to indicate that the request for the particular page was unreliable, i.e. unauthorized. Because the "forbidden" page was not the page the user requested, the context, i.e. page, generated is unreliable. At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to modify Copeland's invention according to the limitations recited in claim 12 in light of Humes's teachings. One skilled would have been motivated to do so because generating an unreliable context would alert the user that they are performing a function that they have not yet been authorized to do so.

Claim 13:

Art Unit: 2135

Copeland further disclose wherein the content corresponding to the reliable context is recorded on a disk mounted in the network accessible apparatus, i.e. email server (paragraph 82).

Claim 14:

Copeland further discloses wherein the command recorded as a "http://" request in the content corresponding to the reliable context is determined as the reliable request, and the command recorded as an "httpu://" request in the content corresponding to the reliable context is determined as the unreliable request (Fig 1, Host data table 166).

Note that an http command is a command over TCP. Table 166 shows the host is authorized to act as a server accepting http commands over TCP as a server. However, there is no indication in the table which indicates that http commands are allowable over UDP. Http commands over UDP are httpu requests. Thus the limitation further recited in claim 14 is disclosed by Copeland.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2135

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 9:00am-4:30pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2135

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ponnoreay Pich
Examiner
Art Unit 2135


HOSUK SONG
PRIMARY EXAMINER

PP